



[001] TITLE OF INVENTION

Changeable Golf Sponsor Display

[002] CROSS-REFERENCE TO RELATED APPLICATIONS

None.

[003] STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not applicable.

[004] REFERENCE TO SEQUENCE LISTING

Not applicable.

[005] BACKGROUND OF THE INVENTION

Category field of the invention;

The present invention relates to changeable indicia substrate displays which utilize a cut through slit within a bendable and laterally curved plastic substrate to pinchingly retain a sheet of paper.

[006] BACKGROUND OF THE INVENTION

Description of Prior Art;

Charitable golf outings display sponsor and donor names using sponsor signs that are placed in the ground throughout the golf course. The current method uses computer cut vinyl lettering applied to a corrugated substrate, and is supported by low quality, and quick to rust "H-shaped" wire stands. When golfing during the event, these current displays become moving distractions in the slightest wind. The current sign display is both expensive to have lettered, and also expensive to remove and re-letter any new sponsor names or tournament information. The tournament director is totally dependent on a local sign shop for price, quality, and rush deadline sponsor additions. Transporting and storage of this corrugated sign and wire stand sign are both cumbersome and bulky. Use of the current display is limited to the golf course on tournament day only.





[007] SUMMARY

This invention of a changeable golf sponsor display is purposed to free up the user's dependency on others to supply printed sponsor indicia, provide more options in substrate types used, including how, when and where a display can be used. The full extension of a retractable, stainless steel leg set transforms a single flexible planar display substrate into a 3-D appearing curvature shape. An inverted U-shape cut through slit located in the substrates center portion pinchingly retains a sheet of indicia paper.

- [008] The instant speed of changing indicia substrates competes with all other assets, including compact storage, safe and easy handling, and vertical self-standing stability.
- [009] With a leg set retracted and inverted, the leg set retains the curvature shape for optional pre-tournament advertising use as an indoor counter top or floor display within a sponsor's own business location, or by any others affiliated with the golf event. A pre-event display advertises the golf tournament for attendance and sponsorship; and wherein the display changes to an outdoor ground penetrating display during the event; and then changes back to an indoor display to thank those previously solicited with photos and dollar amounts taken in. These opened up options of how, when and where the display is used will fill a need in any tournament director's end goal. Last minute sponsor changes; or any message needed quickly may be printed from any computer and instantly displayed. One multi-purpose display can now be used before, during and after the golf event. A users dependency on others is freed up with many more options left open.





[010] BRIEF DESCRIPTION OF THE DRAWINGS

- Fig. 1 shows a rear view of the preferred embodiment with the leg set extended, the curved shape retained, the indicia retaining slit with inwardly and upwardly directed beginning and ending stress points, and a plurality of apertures and notches.
- [011] Fig. 2 shows an overhead view with the leg set extended.
- [012] Fig. 3 shows a rear view before forming the leg set apertures.
- [013] Fig. 4 shows a rear view in storage form with the leg set retracted, and one leg of the leg set removed from the leg set retaining apertures.
- [014] Fig. 5 shows a rear view with the leg set inverted for use as a self standing display.
- [015] Fig. 6 shows a front view with the uppermost vertical planar edge pulled back for flexible indicia insertion.
- [016] Fig. 7 shows a front view with the leg set deployed, and a rigid indicia substrate inserted.
- [017] Fig. 8,a and Fig. 8,b show front and back views respectively, of a vertically adjustable sliding clip. Fig. 8,c shows the substrate shape before its forming.





[018] NUMERALS IN DRAWINGS

- 10 main body of display substrate
- 12 ground level
- 14 wire rod leg set
- 16 elongate bent leg tips
- 18 leg set retaining aperture
- 20 lower base curvature of display
- 22 inwardly and upwardly directed
beginning and ending points of the cut through appendage forming slit
- 24 completely cut-through slit
- 26 rigid indicia retaining tab
- 28 indicia retaining appendage
- 30 planar edge perimeter notch
- 32 horizontal display width comparison
- 34 main body curvature
- 36 aperture forming support tabs
- 38 aperture area before forming
- 40 flexible indicia substrate
- 42 rigid indicia substrate
- 44 uppermost vertical planar edge
- 46 vertically adjustable sliding clip
- 48 curved tab of sliding clip





[019] DETAILED DESCRIPTION OF THE DRAWINGS

- Fig. 1 shows a rear view of the preferred embodiment with the leg set (14) extended, and with the substrates curved shape being retained, and the indicia retaining inverted U-shape cut through slit (24) with inwardly and upwardly directed predetermined beginning and ending stress points (22), and a plurality of leg set retaining apertures (18) and a substrates perimeter edge notches (30). Also shown is the substrates main body portion (10), the rigid indicia retaining tab (26), a grounds level surface (12), the bent tip portions (16) of the leg set, the lower base curved portion (20) of the display, the resulting indicia retaining appendage (28), and the leg aperture forming support tabs (36). Also shown is a dotted line (38) for the reader to see a lateral width of the substrate for comparison with Fig. 3.
- [020] Fig. 2 shows an overhead view with the wire rod leg set (14) extended, and showing the legs bent tips (16), and the leg set retaining apertures (18), and the substrates main body curvature (34).
- [021] Fig. 3 shows a rear view before forming the leg set apertures, and showing the dotted lines of the substrates width comparison (32) for the reader to compare with Figure 1, and the appendage forming cut through slit (24), and the substrate's perimeter edge notches (30), and the substrates main body (10), and the leg aperture forming support tabs (36).
- [022] Fig. 4 shows a rear view in a flattened storage form, with the leg set (14) retracted, and with one leg of the leg set removed from the leg set retaining apertures (18), and showing the folded tabs (36), and the leg sets bent tips (16).
- [023] Fig. 5 shows a rear view with the leg set (14) inverted for use as a self standing display, and the indicia retaining appendage (28), and the held paper indicia sheet (40).
- [024] Fig. 6 shows a front view with the uppermost vertical planar edge (44) pulled back for insertion of the paper indicia sheet (40), and the substrates main body portion (10), and the paper retaining appendage (28), and the lower base curvature (20) of the display.





[025] Fig. 7 shows a front view with the leg set extended, and a rigid indicia substrate (42) inserted between the sliding clips (46) curved tab (48) and the rigid indicia retaining tab (26), and also showing the indicia retaining appendage (28).

[026] Fig. 8,a and Fig. 8,b show front and back views respectively, of a vertically adjustable sliding clip (48). Fig. 8,c shows the substrates shape before its forming.





[027] DESCRIPTION OF THE PREFERRED EMBODIMENT

The preferred embodiment within Figure 1 shows a leg set (14) being fully extended downward through a plurality of leg set retaining apertures (18) which are formed of tabs (36), and with the substrates curved shape being retained by the leg set as shown at the lower base curved portion (20) of the display. The inverted U-shape cut through slit(24) begins and ends with inwardly and upwardly directed beginning and ending locations (22), and forms the resulting indicia retaining appendage (28) which is smaller in size than any retained paper sheet.





[028] DETAILED DESCRIPTION OF THE INVENTION - OPERATION

Fabrication of the overall perimeter edge shape or design is optionally altered to most any single shape that suits the event; from a golf ball and tee shape, to a soccer or football, without detracting from the function or scope of the invention. The option of changing the perimeter shape of the display is possible through the simplicity of the tear preventive indicia retaining slit which forms the indicia substrate retaining appendage. Fabrication of the perimeter design shape and the indicia substrate retention area may be formed via diecutting, and by using only one piece of flexible planar substrate material, plus a means of retention source. A means of retention may include exteriorly fixed abutments, a fixed length tie strap, a resilient stretchable bungee cord, or a fixed width wire rod leg set. This particular display is made of two main parts; a flexible planar polymer substrate, and a wire rod leg set. A third and optional part is a vertically adjustable sliding clip; made also from the same type of substrate as the display, and is purposed to retain rigid indicia substrates.

[029] The major components comprise a formed shape of the main body Fig. 3,(10) of a flexible planar substrate; a completely cut through slit Fig. 3,(24), a plurality of edge perimeter notches Fig. 3,(30); a plurality of aperture forming support tabs Fig.3,(36), and the areas Fig. 3,(38), before being formed into the leg set apertures of Fig. 2,(18). Also shown in Fig. 3,(32) are dotted lines to show comparisons of horizontal compression of the display when compared with Fig 1 and Fig. 4.





[030] The aperture forming support tabs are shown in Fig. 3,(36) before any forming, and in Fig. 4,(36) after their forming.

The support tabs of Fig. 3,(36) are heat-formed, folded over a mold element of a close diameter as that diameter of the leg set, and approximately 180 degrees and back onto, and adjacent to the rearward surface of the vertically lower area of the display substrate, where the surfaces contact each other Fig. 4,(36).

[031] A (u-shape) leg set Fig. 4,(14) is formed from a metal wire rod, with a slight bend formed near each elongate end Fig. 4,(16). One leg of the leg set is positioned parallel to the vertically lower and rearward planar surface of the display and adjacent to the aperture forming support tab. The tab is then lifted away from the surface of display substrate to allow a horizontal sliding of one individual leg behind the tab until the leg is positioned into the leg set aperture Fig. 4,(18). A slight bend Fig. 4,(16) at the elongate end of both leg tips prevents the leg set from prematurely and longitudinally exiting the leg set aperture.

[032] Fig. 4 shows one present state of completion, with the display substrate in a relaxed tension free mode for handling and storage.

[032] Fig. 8,a and Fig. 8,b show resulting tabs after the last process of fabrication; the heat bending of the vertically adjustable sliding clip. Fig. 8,c shows the substrate shape before bends are made. Each elongate end of the substrate in Fig. 8,c is heat formed and folded approximately 180 degrees around side edges and toward the rearward surface of the indicia retaining





appendage for a slidably but snug fit. The center positioned tab at the vertically lower edge within Fig. 8,c,(48) is then bent upwardly toward the user, and bent approximately 180 degrees from its original position; creating a recessed area for retaining the vertically lower edge of a rigid indicia substrate, as the vertically upper edge of the substrate is positioned and retained under and behind the rigid indicia retaining tab shown in Fig. 7,(26).

- [033] Fig. 7 shows the present state of completion with the rigid indicia (42) in position.
- [034] Various drawings showing different views, uses, and stages of fabrication are as follows;
- [035] Shown in Fig. 4,32 is a dotted line for visual width comparison between Fig. 4, (32) and Fig. 1,(32). Fig. 1 is a rear view showing both legs of the leg set positioned within the leg set apertures, and where the display is under compression and retension. Fig. 2 is an overhead view of Fig. 1. Shown are elongate bent leg tips (16); a wire rod leg set (14); a curvature of the frontward convex surface of the display (34); and the leg set apertures (18).
- [036] Fig. 6 is a front view of Fig. 1 with the flexible indicia substrate Fig. 6,(40) inserted between the display substrate (10), and the indicia retaining appendage (28), as the uppermost vertical edge (44) is pulled back toward the user for easier insertion of the flexible indicia substrate (40). A frontward and slightly angled view of the curvature shape (20) is shown at the vertically lower base area of the display substrate. Small dotted lines represent unseen areas of the indicia retaining appendage (28). Large dotted lines represent unseen areas of the flexible indicia substrate (40).





- [037] A rigid indicia substrate in Fig. 7,(42) is shown positioned under and behind the rigid indicia retaining tab (26), where the vertically adjustable sliding clip (46) is raised vertically upward until the curved tab of the clip (48) rests under and supports the rigid indicia substrate. The flexible indicia substrate may be inserted and viewed simultaneously with the rigid indicia substrate, and with only a loss of viewing area equal to the amount which the rigid indicia substrate covers up. The vertically adjustable sliding clip is shown in Fig. 8,a as a front view showing the curved tab of the clip (48); and also in Fig. 8,b as a rear view. The sliding clip is a separate and optional part, yet vertically retained onto and surrounding the indicia retaining appendage through the same tensions of compression and retention that hold the flexible indicia paper sheet substrate.
- [038] A counter-top, table-top, or free and self-standing floor display become options by removing the leg set and vertically inverting the leg set as shown in Fig 5,(14). The overall tensions are slightly reduced with the leg set in this inverted position, yet retain more tension than actually needed for use as an indoor free-standing 3-D display.
- [039] Note beginning and endpoints of the aperture and appendage forming completely through cut slit shown in Fig. 1,(22); and how their last positions and direction of travel are not directionally parallel with any 3 sides of the perimeter of the formed appendage. These directionally predetermined portions of the through cut slit will prevent further tearing or extending of the slit; and while under normal and intended use, and when the display is subjected to directionally intended compression, curvature, and retention.





[040] A display with one leg positioned within one aperture is in a relaxed state with all tensions released. This flattened and stackable carrying position is changed as the user lifts the other remaining support tab back and away from the rearward surface of the display; and laterally slides the remaining leg under the tab until it is positioned into place within the remaining leg set aperture. As this process is done, beginning stresses and tensions have already been placed on the entire display, including the leg set; which is then slid downwardly; and pointedly away from a user's body; and within the open areas of the leg set apertures. The full extension of the leg set completes any compression or curvature shape, and then retains all stresses. The user then pushes the extended leg set into the ground with hands or foot. After the user addresses the now upright display from the frontward indicia viewing side, the uppermost planar perimeter edge Fig. 6,(44) is pulled toward the user's body to allow insertion of the flexible printed indicia, and then released. The curvature shape causes the upper edge to position itself back to the state of tensioned curvature; wherein the indicia Fig. 6,(40) is held tightly in place between the rearward concave surface of the display and the frontward convex surface of the indicia substrate retaining appendage.

[041] A rigid indicia substrate may be inserted at this time, as the user again addresses the display from the frontward viewing side, and then grips the edge (44) and pushes it rearward and away from the user's body.



This action lifts the rigid indicia retaining tab Fig. 7,(26) for easy insertion of the rigid indicia substrate. The vertically upper planar edge is positioned under and behind the tab, and with the rearward surface of the rigid indicia substrate adjacent to the frontward surface of the indicia substrate.

The vertically adjustable sliding clip Fig. 7,(46) is then adjusted vertically upwards until the indentation of its curved tab (48) contacts and supports the vertically lower planar edge of the rigid substrate (42). The clip is optionally pre-mounted onto and partially surrounding the retainer appendage Fig. 7,(28); and is retained by dimensionally close tolerances between the appendage and the main body of the display. When the clip is not in use, there is no obstruction or interference with the indicia substrate when the clip is positioned at the vertically lowest position possible.

- [042] Other means for retention of the curvature shape can be used in addition to the leg set; including the current wire stands now widely in use; a fixed length plastic tie strap; an elastic bungee cord; and any fixed width abutments are all functional for retention.
- [043] Users have the option at any time to remove the leg set, and then vertically invert, and replace the inverted leg set for multi-purpose indoor and outdoor uses Fig. 5.